

4760.a.1223

Proceedings of the Ninth International Congress of
Phonetic Sciences, Copenhagen 1979

Actes du Neuvième Congrès International des
Sciences Phonétiques, Copenhague 1979

Akten des neunten internationalen Kongresses für
phonetische Wissenschaften, Kopenhagen 1979

PROCEEDINGS OF THE NINTH INTERNATIONAL CONGRESS
OF
PHONETIC SCIENCES

HELD IN COPENHAGEN 6 - 11 AUGUST 1979

VOLUME III



COPENHAGEN

1980

PREFACE

The Ninth International Congress of Phonetic Sciences was held in Copenhagen 6-11 August 1979 under the patronage of Her Majesty Queen Margrethe II of Denmark and under the auspices of the Permanent Council for the Organization of International Congresses of Phonetic Sciences.

Volume I and II of the Proceedings were published before the Congress. This third and last volume contains the full text of the plenary lecture, the special lectures, the full introductions by the moderators of symposia, and summaries of the discussions at the (semi-)plenary sessions.

The summaries of the discussions are based on tape recordings of the meetings and, in some cases, on written versions submitted by the discussants. We want to express our sincere thanks to the moderators of the symposia for undertaking the difficult job of summarizing the discussions of the symposium papers. The discussions of the other (semi-)plenary meetings have been summarized by members of the congress committee. It has been necessary to make, sometimes rather drastic, abbreviations in order not to exceed the space available. Please note that in the summaries the use of the first person pronoun does not necessarily imply direct citation. The summaries have not been sent to the contributors for approval, since this would have delayed publication considerably. We hope we have succeeded in reproducing their main ideas and ask for their indulgence if we have not. - We are grateful to the secretary of the Institute of Phonetics, Else Parkmann, for typing most of the manuscripts for this volume.

We wish to repeat our gratitude for the support we have received from The Danish Research Council for the Humanities, which

Editorial Committee:

ELI FISCHER-JØRGENSEN and NINA THORSEN

assisted by the staff of the Institute of Phonetics,
University of Copenhagen

made it possible to hold this congress, the Danish Ministry of Education, the "Tuborg Foundation", and "Knud Højgaard's Foundation", and to the University of Copenhagen for granting us disposal of the Amager Buildings of the University.

Finally, we want to thank all members who, as lecturers, chairpersons or participants in the discussions, have contributed to the success of the congress.

The Congress Committee

C O N T E N T S

VOLUME III

Preface	V
Opening and Closing Sessions	IX
Abbreviations	XI
P l e n a r y L e c t u r e	
BJÖRN LINDBLÖM: The goal of phonetics, its unification and application	3
Discussion	19
S t a t u s R e p o r t s	
SPEECH PRODUCTION	
Reporter's additional remarks	29
Discussion	31
SPEECH PERCEPTION	
Reporters' additional remarks	41
Discussion	45
PHONOLOGY	
Reporters' additional remarks	59
Discussion	66
S p e c i a l L e c t u r e s	
GUNNAR FANT: The relation between area functions and the acoustical signal	79
Discussion	109
OSAMU FUJIMURA: Modern methods of investigation in speech production	117
Discussion	132
NIELS A. LASSEN and BO LARSEN: Cortical activity in left and right hemisphere during language related brain functions	137
Discussion	145
HISASHI WAKITA: New methods of analysis in speech acoustics	151
Discussion	173
S y m p o s i a	
SYMPOSIUM NO. 1: Phonetic universals in phonological systems and their explanation	
JOHN J. OHALA: Introduction	181
Comments from the panelists	185
Discussion	190

SYMPOSIUM NO. 2: The psychological reality of phonological descriptions	
VICTORIA A. FROMKIN: Introduction	195
Comments from the panelists	202
Discussion	210
SYMPOSIUM NO. 3: Acquisition of the phonological system of the mother tongue	
CHARLES A. FERGUSON: Introduction	217
Comments from the panelists	223
Discussion	225
SYMPOSIUM NO. 4: Social factors in sound change	
EINAR HAUGEN: Introduction	229
Comments from the panelists	237
Discussion	241
SYMPOSIUM NO. 5: Temporal relations within speech units	
ILSE LEHISTE: Introduction	247
Comments from the panelists	254
Discussion	258
SYMPOSIUM NO. 6: Motor control of speech gestures	
JAMES LUBKER: Introduction	267
Comments from the panelists	274
Discussion	279
SYMPOSIUM NO. 7: The relation between sentence prosody and word prosody	
EVA GÅRDING: Introduction	283
Comments from the panelists	287
Discussion	290
Moderator's afterthoughts	299
SYMPOSIUM NO. 8: Perception of speech versus nonspeech	
DAVID B. PISONI: Introduction	301
Comments from the panelists	312
Discussion	315
W o r k i n g G r o u p	
The syllable in phonological theory	
ALAN BELL: Summary	323
List of participants	
Delegates	327
Members	328
I n d e x	363

OPENING AND CLOSING SESSIONS

The opening session was chaired by Thomas V. Gamkrelidze, Einar Haugen, and Eberhard Zwirner.

Welcome addresses were given by the President of the Congress, Eli Fischer-Jørgensen, and by the Dean of the Faculty of the Humanities, University of Copenhagen, Ole Karup Pedersen.

"Københavns Strygekvarteret" played a String quartet by the Danish composer Niels W. Gade.

Inaugural addresses were given by the President of the Permanent Council, Dennis B. Fry, and by the Vice-President of the International Society of Phonetic Sciences, Martin Kloster Jensen.

Roman Jakobson had been invited to give a key-note address, but was unfortunately prevented from attending the congress. Instead, he sent a letter to the congress, which was read at the session and in which he expressed his wishes for a most fruitful congress and the hope "that the idea of genuinely interdisciplinary research will be evermore realized in the field of speech sounds as it was anticipated by the late van Ginneken, the originator of these Congresses, who astutely assigned a plural to the idea of phonetic sciences". He continued, "It becomes still clearer that any constituent of the speech sound requires a joint analysis both of its linguistic functions and of its physical means, and hence a consistent cooperation of linguists with physicists, physiologists, and of course psychologists, since in speech sounds everything fulfills a linguistic task and nothing can be conceived of as raw, gross sound matter. At present, new, dazzling vistas open for a wider interdisciplinary cooperation. The current international neurological discoveries reveal an ever-widening pattern of relations between language, particularly speech, and the brain, which enables us to enter step by step into the deepest structural puzzles both of the brain and of language."

At the closing session, which was chaired by Gunnar Fant and Arthur S. Abramson, Ilse Lehiste gave a brief summary of the scientific results of the congress. Dennis B. Fry spoke on behalf of the Permanent Council for the Organization of International Congresses of Phonetic Sciences. Eli Fischer-Jørgensen closed the congress.